

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

IN REPLY REFER TO: 4530-1

Carroll D. Besadny Secretary

BOX 7921 MADISON, WISCONSIN 53707

CERTIFIED MAIL RETURN RECEIPT REQUESTED

July 28, 1987

Mr. Thomas Jayne, Manager Technical Services Thilmany Pulp and Paper Company Thilmany Road Kaukauna, WI 54130

Dear Mr. Jayne:

Your application for an air pollution control permit has been processed in accordance with sec. 144.392, Wis. Stats. This elective operation permit documents alternate sulfur dioxide emission limitations approved under sec. NR 417.07, Wis. Adm. Code.

The enclosed permit is issued to provide authorization for your source to operate in accordance with the requirements and conditions set forth within Parts I and II of the permit. Please read it carefully.

This permit may be revised as a result of rulemaking by the Department or the adoption of standardized permit forms and procedures which may differ from this document. At the time of such revision, permits reflecting these changes will automatically be issued.

A copy of this permit should be available at the source for inspection by any authorized representative of the Department. Questions about this permit should be directed to the Bureau of Air Management, P.O. Box 7921, Madison, Wisconsin 53707, (608) 266-7718.

NOTICE OF APPEAL RIGHTS

This decision is effective immediately unless a petition for a contested case hearing for administrative review of this decision is served on the Secretary of the Department of Natural Resources under section 144.403, Stats., within 30 days after the date of mailing of this decision. Any such petition for hearing shall set forth specifically the issue sought to be reviewed, the interest of the petitioner, the reasons why a hearing is warranted and the relief desired. This notice is provided pursuant to section 227.48(2), Stats.

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

Steven Klafka, P.E., Environmental Engineer Bureau of Air Management

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cor Air Enforcement Branch - EPA, Region V Dan Schramm - Lake Michigan District

AIR POLLUTION CONTROL PERMIT ATTAINMENT AREA MAJOR SOURCE

| EI FACILITY NO. 445031180 PERMIT NO. 86-SJK-072 |
|--|
| STACK NO.(S). S7, S8, S9, S10 TYPE: Permit to Operate |
| SOURCE NO.(S). B7, B8, B9, B10, B11 |
| THIS OPERATING PERMIT IS PERMANENT UNLESS ALTERED, REVOKED OR SUSPENDED. |
| In compliance with the provisions of Chapter 144, Wis. Stats., and Chapters NR 400 to NR 499, Wis. Adm. Code, |
| Name of Source: Thilmany Pulp and Paper Company |
| Street Address: Thilmany Road Kaukauna, WI 54130 |
| Principal Officer or Authorized Representative, & Title: Mr. Thomas Jayne, Manager — Technical Services |
| is authorized to operate five industrial boilers described in the plans and specifications dated September 29, 1984; November 28, 1984; February 26, 1985; March 1, 1985 (EOP Request); April 18, 1985; June 14, 1985; November 21, 1985; December 21, 1985; May 14, 1986; July 25, 1986; July 29, 1986; November 18, 1986; November 20, 1986; December 12, 1986; January 15, 1987; January 16, 1987; April 15, 1987 and May 18, 1987 in conformity with the conditions herein |
| This authorization requires compliance by the permit holder with the emission limitations, monitoring requirements and other terms and conditions set forth in Parts I and II hereof. |
| Dated at Madison, Wisconsin this 28th day of July, 1987. |
| STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES For the Secretary |

By Michael E. Debrock for Donald F. Theiler, Director Bureau of Air Management

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PART I SPECIFIC PERMIT CONDITIONS

A. Specific Emission Limitations

1. 122.6 Million BTU Per Hour Waste Heater Boiler No. B7, Stack No. S7

| Pollutant | Applicable Wisconsin Adm. Code, or Statute | Limitation/Requirement |
|-------------------|---|--|
| Particulate | Section NR 415.06(1)(b), Wis. Adm. Code | 0.30 pounds per million BTU heat input, and 36.8 pounds per hour |
| Sulfur Dioxide | Section NR 417.07, Wis. Adm. Code | 92.7 pounds per hour averaged over any consecutive 24-hour period* |
| Nitrogen Oxides | Section NR 428.03, Wis. Adm. Code | 48.7 pounds per hour as nitrogen dioxide averaged over any consecutive 3-hour period** |
| Carbon Monoxide | Section NR 426.025, Wis. Adm. Code | 19.4 pounds per hour averaged over any consecutive 3-hour period** |
| Organic Compounds | Section NR 419.03(1), Wis. Adm. Code | <pre>24.5 pounds per hour as methane averaged over any consecutive 3-hour period**</pre> |
| Visible Emissions | Section NR 431.05(1)(a), Wis. Adm. Code | 20% opacity |

- * This sulfur dioxide limitation was developed as an alternate emission limit under Sec. NR 417.07(5), Wis. Adm. Code.
- ** This limitation is set in order to document the maximum emissions and avoid air pollution.



2. 206.3 Million BTU Per Hour Kraft Recovery Boiler No. B8, Stack No. S8

| Pollutant | Applicable Wisconsin Adm. Code, or Statute | Limitation/Requirement |
|----------------------|---|---|
| Particulates | Section NR 415.06(1)(b), Wis. Adm. Code | 0.30 pounds per million BTU heat input, and 61.9 pounds per hour. |
| Sulfur Dioxide | Section NR 417.07, Wis. Adm. Code | 466.3 pounds per hour averaged over any consecutive 24-hour period* |
| Nitrogen Oxides | Section NR 428.03, Wis. Adm. Code | 45.7 pounds per hour as nitrogen dioxide averaged over any consecutive 3-hour period** |
| Carbon Monoxide | Section NR 426.025, | 471.5 pounds per hour averaged over any consecutive 3-hour period** |
| | Wis. Adm. Code | ₹ |
| Organic Compounds | Section NR 419.03(1), Wis. Adm. Code | 40.5 pounds per hour as methane averaged over any consecutive 3-hour period** |
| Total Reduced Sulfur | Sec. NR 417.06(1), Wis. Adm. Code | O.5 pounds (as sulfur) per equivalent ton of air-dried Kraft pulp, or 17.5 parts per million dry volume (as hydrogen sulfide), whichever is more restrictive. |
| Visible Emissions | Sec. NR 431.05(1)(a), Wis. Adm. Code | 20% opacity |

- * The combined sulfur dioxide emissions from Boiler No. B8, Stack No. S8 and Boiler No. B10, Stack No. S10 shall not exceed 466:3 pounds per hour as averaged over any consecutive 24-hour period. This sulfur dioxide limitation was developed as an alternate emission limit under Sec. NR 417.07(5), Wis. Adm. Code.
- ** This limitation is set in order to document the maximum emissions and avoid air pollution. This limitation applies to the combined emissions from Kraft recovery boilers Nos. 8 and 10.



3. 192.4 Million BTU Per Hour Cyclone Boiler No. B9, Stack No. S9.

| Pollutant | Applicable Wisconsin Adm. Code, or Statute | Limitation/Requirement |
|-------------------|---|--|
| Particulate | Sec. NR 415.06(1)(b), Wis. Adm. Code | 0.30 pounds per million BTU heat input, and 57.7 pounds per hour |
| Sulfur Dioxide | Sec. NR 417.07, Wis. Adm. Code | 7.0 pounds per million BTU heat input averaged over any consecutive 24 hour period, 5.5 pounds per million BTU heat input averaged over any consecutive 30 day period, and 3,865.4 pounds per hour averaged over any consecutive 24-hour period* |
| Nitrogen Oxides | Section NR 428.03, Wis. Adm. Code | 727.5 pounds per hour as nitrogen dioxide averaged over any consecutive 3-hour period** |
| Carbon Monoxide | Section NR 426.025, Wis. Adm. Code | 83.6 pounds per hour averaged over any consecutive 3-hour period** |
| Visible Emissions | Sec. NR 431.05(1)(a), Wis. Adm. Code | 20% opacity |

- * The combined sulfur dioxide emissions from Boiler No. B9, Stack No. S9 and Boiler No. B11, Stack No. S9 shall not exceed 3865.4 pounds per hour as averaged over any consecutive 24-hour periods if the height of the stack exhausting these emissions is 290 feet or higher. Combined emissions shall not exceed 1.7 pounds per million BTU heat input if the stack height is between 175 and 290 feet. This sulfur dioxide limitation was developed as an alternate emission limit under Sec. NR 417.07(5), Wis. Adm. Code.
- ** This limitation is set in order to document the maximum emissions and avoid air pollution. This limitation applies to the combined emissions from cyclone boilers Nos. 9 and 11.

4. 321.7 Million BTU Per Hour Kraft Recovery Boiler No. B10, Stack No. S10

| Pollutant | Applicable Wisconsin Adm. Code, or Statute | Limitation/Requirement |
|----------------------|---|---|
| Particulate | Sec. NR 415.06(1)(b), Wis. Adm. Code | 0.30 pounds per million BTU heat input, and 96.5 pounds per hour |
| Sulfur Dioxide | Sec. NR 417.07, Wis. Adm. Code | 466.3 pounds per hour averaged over any consecutive 24-hour period* |
| Nitrogen Oxides | Section NR 428.03, Wis. Adm. Code | 45.7 pounds per hour as nitrogen dioxide averaged over any consecutive 3-hour period** |
| Carbon Monoxide | Section NR 426.025, Wis. Adm. Code | 471.5 pounds per hour averaged over any consecutive 3-hour period** |
| Organic Compounds | Section NR 419.03(1), Wis. Adm. Code | 40.5 pounds per hour as methane averaged over any consecutive 3-hour period** |
| Total Reduced Sulfur | Sec. NR 417.06(1), Wis. Adm. Code | 0.5 pounds (as sulfur) per equivalent ton of air-dried Kraft pulp, or 17.5 parts per million dry volume (as hydrogen sulfide), whichever is more restrictive. |
| Visible Emissions | Sec. NR 431.05(1)(a), Wis. Adm. Code | 20% opacity |

The combined sulfur dioxide emissions from Boiler No. B8, Stack No. S8 and Boiler No. B10, Stack No. S10 shall not exceed 466.3 pounds per hour as averaged over any consecutive 24-hour period. This sulfur dioxide limitation was developed as an alternate emission limit under Sec. NR 417.07(5), Wis. Adm. Code.

^{**} This limitation is set in order to document the maximum emissions and avoid air pollution. This limitation applies to the combined emissions from Kraft recovery boilers Nos. 8 and 10.

5. 379 Million BTU Per Hour Cyclone Boiler No. Bll, Stack No. S9

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|-------------------|---|--|
| Pollutant | Applicable Wisconsin Adm. Code, or Statute | Limitation/Requirement |
| Particulate | Sec. NR 415.06(1)(b), Wis. Adm. Code | 0.30 Pounds per million BTU heat input, and 113.7 pounds per hour |
| Sulfur Dioxide | Sec. NR 417.07, Wis. Adm. Code | 7.0 pounds per million BTU heat input averaged over any consecutive 24-hour period, 5.5 pounds per million BTU heat input averaged over any consecutive 30 day period, and 3,865.4 pounds per hour averaged over any consecutive 24-hour period* |
| Nitrogen Oxides | Section NR 428.03, Wis. Adm. Code | 727.5 pounds per hour as nitrogen dioxide averaged over any consecutive 3-hour period** |
| Carbon Monoxide | Section NR 426.025, Wis. Adm. Code | 83.6 pounds per hour averaged over any consecutive 3-hour period** |
| Visible Emissions | Sec. NR 431.05(1)(a), Wis. Adm. Code | 20% opacity |

- * The combined sulfur dioxide emissions from Boiler No. B9, Stack No. S9 and Boiler No. B11, Stack No. B9 shall not exceed 3,865.4 pounds per hour as averaged over any consecutive 24-hour period if the height of the stack exhausting these emissions is 290 feet or higher. Combined emissions shall not exceed 1.7 pounds per million BTU heat input if the stack height is between 175 and 290 feet. This sulfur dioxide limitation was developed as an alternate emission limit under Sec. NR 417.07(5), Wis. Adm. Code.
- ** This limitation is set in order to document the maximum emissions and avoid air pollution. This limitation applies to the combined emissions from Kraft recovery boilers Nos. 9 and 11.

B. Other Specific Conditions

- Waste heat boiler No. B7 shall only burn wood waste, paper broke, #6 fuel oil, natural gas and solvent vapors from Akrosil silicone coater P61 as fuel.
- 2. Kraft recovery boiler No. B8 shall only burn Kraft pulping liquor, #6 fuel oil and natural gas as fuel.
- 3. Cyclone boiler No. 89 shall only burn bituminous coal, paper broke, #6 fuel oil, natural gas and solvent vapors from Akrosil silicone coater P61 as fuel.
- Kraft recovery boiler No. BlO shall only burn Kraft pulping liquor, #6 fuel oil and natural gas as fuel.
- Cyclone boiler No. Bll shall only burn bituminous coal, #6 fuel oil, #2 fuel oil, natural gas and paper broke as fuel.
- The sulfur content of the coal burned in Boiler Nos. 9, 10 and 11 shall not exceed 4.4 percent by weight.
- 7. The sulfur content of the #6 fuel oil burned in Boiler Nos. 7, 8, 9, 10 and 11 shall not exceed 2.5 percent by weight.

Compliance Demonstration

8. Source performance tests shall be conducted within 120 days after the issuance of this permit to prove compliance with the particulate limitations for Boiler No. 7 burning bark and broke, and the sulfur dioxide and total reduced sulfur limitations for Boiler Nos. 8 and 10 burning Kraft liquor. The Department shall be informed at least 10 working days prior to the tests so a Department representative can witness the testing. At the time of notification, a stack test plan following the provisions set forth in Section NR 439.05, Wis. Adm. Code, shall also be submitted for approval.

Two copies of the report on the tests shall be submitted to the Department for evaluation within 30 days after the tests.

9. By December 31, 1987, Thilmany Pulp & Paper Company shall install a continuous emission monitor on stack No. S9 exhausting boiler Nos. 9 and 11. This monitor shall be capable of continuously measuring and recording the sulfur dioxide emissions from these boilers to determine compliance with the limits (pounds per hour and pounds per million BTU heat input) contained in Part A of this permit.

This monitor shall be installed, calibrated and maintained as described in Performance Specification 2, 40 CFR Part 60, Appendix B.

10. Thilmany Pulp & Paper Company shall install continuous fuel monitors on boiler Nos. 7, 8 and 10 for natural gas, #2 fuel oil, #6 fuel oil and Kraft liquor. Thilmany shall keep daily records of all fuels consumed in Boiler Nos. 7, 8 and 10 and the daily hours of operation for each boiler.

- 11. Every month, Thilmany Pulp & Paper Company shall calculate and record the daily average sulfur dioxide emission rate in units of pounds per hour and pounds per million BTU for Boiler Nos. 9 and 11 and units of pounds per hour for Boiler Nos. 7, 8 and 10. Average hourly boiler sulfur dioxide emissions shall be calculated for each boiler by dividing total sulfur dioxide emissions for each day by the hours of boiler operation for that day. These emission records shall be kept available for inspection by Department personnel for two years.
- 12. Compliance with the sulfur dioxide control requirements contained in this permit for Boiler Nos. B9 and B11, shall be attained by December 31, 1987. All other requirements contained in this permit are effective immediately.

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GENERAL PERMIT CONDITIONS FOR DIRECT STATIONARY SOURCES

A. Scope

This permit is valid only for the structure, building, facility, equipment or operations specifically identified herein. All emissions authorized hereby shall be consistent with the terms and conditions of Parts I and II of this permit.

B. Prevention of Air Pollution

No person may cause, allow or permit the emissions of any air contaminant into the ambient air from a source subject to this permit which substantially contribute to the exceeding of an air standard or which cause air pollution.

C. Notification Requirements

Pursuant to sec. 144.394(3), Wis. Stats. and sections NR 445.05 and 439.025(6), Wis. Adm. Code, the Department shall be notified of the following events:

<u>Fvent</u> <u>Timing</u>

Hazardous substance air spill Immediate-call: (608)266-3232

Malfunction or event not reported Within 8 hours of onset in advance which causes or may cause any violation of an emission limitation.

Noncompliance with any other condition Written notification within 5 days identifying noncompliance, cause, duration, and steps taken to prevent reoccurrence.

D. Advance Notice of Startup or Shutdown

The permittee shall report to the Department in advance schedules for planned shutdown and startup of air pollution control equipment and the measures to be taken to minimize the down time of the control equipment. Scheduled maintenance or startup of other equipment which causes an emission limit to be exceeded shall also be reported in advance to the Department. Advance reporting pursuant to this permit condition or sec. NR 439.025(8), Wis. Adm. Code, shall not relieve any person from the duty to comply with any applicable emission limitations.

E. Right of Entry

Pursuant to sec. 144.34, Wis. Stats., the permittee shall allow authorized representatives of the Department of Natural Resources to enter upon the permittee's premises; to have access to and copy any records required to be kept under the terms and conditions of this permit; and to make any inspection necessary to ascertain compliance.

F. Malfunction Prevention and Abatement Plans

Pursuant to sec. NR 439.09. Wis. Adm. Code, the owner or operator of any direct or portable source which may emit hazardous substances or emits more than 15 pounds in any day or 3 pounds in any hour of carbon monoxide, particulate matter, hydrocarbons, sulfur oxides, nitrogen dioxide or photochemical oxidants shall prepare a written malfunction prevention and abatement plan to prevent, detect and correct malfunctions or equipment failures which may cause any emission limitation to be violated or which may cause air pollution. Any such plan shall be carried out by the owner or operator. The plan shall be updated as needed and is subject to Department review, approval and amendment.

G. Emission Control Action Programs

Pursuant to sec. NR 493.04, Wis. Adm. Code, if the source(s) covered by this permit emits 0.25 tons per day or more of carbon monoxide, particulate matter, hydrocarbons, sulfur oxides, nitrogen dioxide or photochemical oxidants, the permittee shall prepare an emission control action program consistent with good industrial practice and safe operating procedures, for reducing the emission of air contaminants into the outdoor atmosphere during periods of an air pollution alert, air pollution warning or air pollution emergency. The emission control action program shall be in writing, available on the premises for inspection and subject to review and approval by the Department on request.

H. Permit Alteration, Revocation, Suspension

After notice and opportunity for a hearing, as provided in sec. 144.395, Wis. Stats., this permit may be altered, suspended, or revoked in whole or in part for cause. Circumstances which could result in alteration of the permit include but are not limited to the following:

- A significant or recurring violation of any term or condition of this permit;
- Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
- A change in any applicable rule.

In addition to the circumstances in 1. and 2., failure to pay any required permit fees may result in revocation or suspension.

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I. Civil Liability

Nothing in this permit that the construed to relieve the permit holder from civil penalties under this 144.426, 144.96 or 144.99, Wis. Stats., for violation of the least of conditions of this permit, or for violation of secs. 144.30 to 144.476, 144.76 and 144.96, Wis. Stats., or of any rule or any special order is the under those sections.

J. Other Laws

Nothing in this permit shall be construed to preclude the institution of any legal action on to relieve the permit holder from any responsibilities. Habilities, or penalties established pursuant to any other applicable tederal. Itale, or local law or regulation. The issuance of this permit does not convey any property rights in either real or personal property, nor does it authorize any injury to private property or any invasion of personal rights.

K. Records Retention

All records and information resulting from any monitoring activities required by this permit that he retained by the permittee for a minimum of three years pursuant to sec. NR 439.03, Wis. Adm. Code, unless specified in writing by the hepsytment.

L. <u>Reporting</u>

Reports required by that I of this permit, if any, shall be signed by an authorized representative of the source.

M. Confidential Information

Except for information determined to be confidential under sec. 144.33, Wis. Stats., any Information or reports received by the Department in the permit application process or subsequently obtained, will be available for public inspection at the offices of the Department of Natural Resources.

N. Notification of liquistry

In the event of a transfer of control of operation or ownership of the source, the permittee, in to such transfer, shall notify its successor by letter of the need to a permit. A copy of this letter shall be forwarded to the Department

O. Nonexempt Modification,

"Modification" means any that we in the physical size or method of operation of a stationary where which:

(1) increases the particles amount of emissions of an air contaminant;

- (2) results in the emission of an air contaminant not previously emitted;
- (3) results in the violation of an ambient air increment.

Any modification of a source subject to this permit, which is in violation of a term or condition of this permit, is prohibited and may not occur unless a modification of the permit is obtained. If the modification is not in violation of a term or condition of this permit and the modification is an exempt modification under sec. 144.391(4), Stats., or additional permit is required for the modification. All other modifications require a permit prior to commencing the modification.

P. Reconstruction or Replacement

Unless the replacement is authorized by a permit or is exempt under sec. NR 406.04, Wis. Adm. Code, replacement of the source(s) covered by this permit is prohibited. If the source(s) covered by this permit is a nonattainment major source or is subject to New Source Performance Standards, reconstruction may also be prohibited unless authorized by a permit.

Q. <u>Circumvention</u>

Pursuant to sec. NR 439.08, Wis. Adm. Code, the installation or use of any article, machine, equipment, process, or method, which conceals an emission which would otherwise constitute a violation of an applicable pepartment. Such concealment includes, but is not limited from the gaseous diluents to achieve compliance and the unnecessary separation of an operation into parts to avoid coverage by a rule that applies only to

R. Operating Permit Review

Operating permits shall be reviewed at least once every 5 years and not more than once every 2 years, in accordance with sec. 144.397, Wis. Stats. The Department may use information received in public comments or at the public hearing as the basis to initiate proceedings under sec. 144.395, Wis. Stats., to alter, suspend, or revoke the permit.

S. <u>Forfeitures</u>

In addition to other penalties or remedies, sec. 144.426, Wis. Stats., provides that any person who violates this permit shall forfeit not less than \$10 nor more than \$25,000 for each violation. Each day of continued violation is a separate offense.

T. <u>Severability</u>

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

U. Payment of Application Fee

Sources which are required under chapter NR 410, Wis. Adm. Code and sec. 144.399, Wis. Stats to pay an application fee shall pay the fee within 30 days of the date of the billing statement. The Department may not issue the release for permanent operation of the source until the Department receives full payment of the application fee.

V. Annual Permit Fee

Pursuant to sec. NR 410.05, Wis. Adm. Code, any person who owns or operates an air contaminant source for which an air pollution control permit has been issued shall pay an annual fee for the implementation and enforcement of the permit conditions.

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